

Title (en)  
A METHOD FOR CALIBRATING ANTENNA RECIPROCITY IN A BASE STATION OF WIRELESS NETWORK AND A DEVICE THEREOF

Title (de)  
VERFAHREN ZUR KALIBRIERUNG EINER ANTENNENVERKNÜPFUNG IN EINER BASISSTATION EINES DRAHTLOSEN NETZWERKS UND VORRICHTUNG DAFÜR

Title (fr)  
PROCÉDÉ D'ÉTALONNAGE DE RÉCIPROCITÉ D'ANTENNES DANS UNE STATION DE BASE D'UN RÉSEAU SANS FIL ET DISPOSITIF CORRESPONDANT

Publication  
**EP 2594100 A4 20150715 (EN)**

Application  
**EP 11811892 A 20110715**

Priority

- CN 201010229376 A 20100716
- IB 2011001866 W 20110715

Abstract (en)  
[origin: WO2012014066A2] The present invention provides a method and device for calibrating antenna reciprocity via OTA in a base station of wireless network, and the method comprises: determining, based on a predefined rule, a plurality of calibrating UEs out of a plurality of UEs, and antennas, to be calibrated by the plurality of calibrating UEs, of the plurality of base stations, wherein the plurality of calibrating UEs are configured to calibrate antennas of the plurality of base stations; and calibrating, according to the determined calibration relationship, the antennas reciprocity of the plurality of base stations based on the plurality of calibrating UEs. With the method of present invention, communication channel model can be calibrated effectively so as to enhance antenna reciprocity in CoMP scenario.

IPC 8 full level  
**H04W 24/08** (2009.01); **H04B 7/02** (2006.01); **H04B 17/12** (2015.01); **H04W 24/00** (2009.01)

CPC (source: EP KR US)  
**H04B 7/024** (2013.01 - EP KR US); **H04B 17/12** (2015.01 - EP KR US); **H04L 5/0035** (2013.01 - KR); **H04W 24/00** (2013.01 - KR US); **H04W 24/08** (2013.01 - KR); **H04W 24/08** (2013.01 - EP US)

Citation (search report)

- [AD] TD TECH: "On the Aantenna Calibration in TDD CoMP", 3GPP DRAFT; R1-101016, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. San Francisco, USA; 20100222, 16 February 2010 (2010-02-16), XP050418590
- [A] FAN HUANG ET AL: "Performance Analysis of Antenna Calibration in Coordinated Multi-Point Transmission System", 2010 IEEE VEHICULAR TECHNOLOGY CONFERENCE (VTC 2010-SPRING) - 16-19 MAY 2010 - TAIPEI, TAIWAN, IEEE, US, 16 May 2010 (2010-05-16), pages 1 - 5, XP031696137, ISBN: 978-1-4244-2518-1
- [A] SAMSUNG: "Antenna calibrations for TDD CoMP", 3GPP DRAFT; R1-101177 TDD COMP, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. San Francisco, USA; 20100222, 16 February 2010 (2010-02-16), XP050418711
- See references of WO 2012014066A2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2012014066 A2 20120202; WO 2012014066 A3 20120322**; BR 112013001034 A2 20160531; CN 102340339 A 20120201; CN 102340339 B 20140326; EP 2594100 A2 20130522; EP 2594100 A4 20150715; EP 2594100 B1 20170830; JP 2013534380 A 20130902; JP 5497966 B2 20140521; KR 101440324 B1 20140915; KR 20130054988 A 20130527; US 2013114459 A1 20130509; US 9402192 B2 20160726

DOCDB simple family (application)  
**IB 2011001866 W 20110715**; BR 112013001034 A 20110715; CN 201010229376 A 20100716; EP 11811892 A 20110715; JP 2013520233 A 20110715; KR 20137003731 A 20110715; US 201113810487 A 20110715